

WHAT IS CLAIMED IS:

1. An ink-jet head unit comprising:

an ink-jet head having a plurality of ejection-energy generating elements for generating energies for ejecting an ink from a plurality of nozzles, and a row of terminals exposed on a surface thereof for energizing said plurality of ejection-energy generating elements;

a flexible wiring board having a wiring pattern jointed in an end portion thereof to said row of terminals of said ink-jet head, said flexible wiring board extending in a direction perpendicular to a direction of extension of said row of terminals, and including an inclined portion extending from said end portion obliquely upwardly and outwardly of said surface of said ink-jet head; and

a rigid member having a higher degree of rigidity than said flexible wiring board and disposed on said flexible wiring board in contact with at least said end portion.

2. The ink-jet head unit according to claim 1, wherein said rigid member includes an overhang portion located between said inclined portion and a joined portion of said wiring pattern and said terminals.

3. The ink-jet head unit according to claim 2, wherein said rigid member is a planar member in contact with a surface area of said flexible wiring board which is larger than that of said joined

portion of said wiring pattern and said terminals.

4. The ink-jet head unit according to claim 2, wherein said rigid member includes an easily deformable portion which is located at a distal end of said overhang portion and which is more easily deformable in a direction of extension of said inclined portion of said flexible wiring board, than a portion of said rigid member which corresponds to said jointed portion of said wiring pattern and said terminals.

5. The ink-jet head unit according to claim 4, wherein said easily deformable portion is a thin-walled portion having a smaller thickness than the other portion of said rigid member, said thin-walled portion being formed at a position at which said flexible wiring board is bent to form said inclined portion.

6. The ink-jet head unit according to claim 1, wherein said rigid member is a cured mass of an adhesive agent applied to a surface of said flexible wiring board which is opposite to a surface having said wiring pattern.

7. The ink-jet head unit according to claim 6, wherein said cured mass of the adhesive agent includes an inner portion in the form of a lattice located within said jointed portion of said wiring pattern and said terminals.

8. The ink-jet head unit according to claim 7, wherein said

adhesive agent is a UV-curable adhesive resin curable by exposure to an ultraviolet radiation.

9. The ink-jet head unit according to claim 1, wherein said rigid member is formed of a synthetic resin.

10. The ink-jet head unit according to claim 9, wherein said synthetic resin includes polyethylene terephthalate.

11. The ink-jet head unit according to claim 1, wherein said rigid member is formed of a metallic material.

12. The ink-jet head unit according to claim 1, wherein said flexible wiring board is a rectangular board including a longitudinal end at which said wiring pattern is joined to said row of terminals of said ink-jet head.

13. The ink-jet head unit according to claim 1, wherein said wiring pattern has a plurality of conductive wires which extend in the direction perpendicular to said direction of extension of said row of terminals and each of which has a terminal land at one end thereof, said conductive wires being connected to said terminals through the terminal lands.

14. The ink-jet head unit according to claim 1, wherein said rigid member is a rectangular member bonded to said flexible wiring board.

15. The ink-jet head unit according to claim 1, wherein said flexible wiring board includes an electrically insulating flexible film on which said wiring pattern is formed.

16. The ink-jet head unit according to claim 15, wherein said electrically insulating flexible film is a polyimide film.